ANNUAL WATER QUALITY REPORT

Reporting Year 2022

Presented By

Georgetown Water Department

PWS ID#: 3105000

Continuous Improvement

Georgetown Water Department is pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2022. Over 700 samples were outsourced to certified laboratories in order to provide the following report. The Georgetown Water Department office and field staff work tirelessly to supply Georgetown residents with safe, clean drinking water. During the past year, we have supplied drinking water to our residents through a record drought while operating with half our normal filtering capacity. We successfully completed the refurbishment of one filter this past winter and expect to complete the second filter by January 2024.

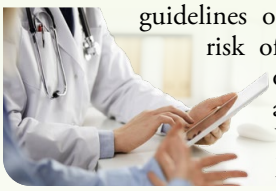
As we continually strive to adopt new methods for delivering the best-quality drinking water to you, the department is currently considering design changes within our treatment process to help alleviate wear and tear on the treatment filters and support the health of our overall water system. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users. Please remember that we are always available should you ever have any questions or concerns about your water.

Your Drinking Water Source

Georgetown's water is a blend from three groundwater wells. These shallow (40 to 60 feet deep), gravel-packed wells draw water from the Parker River aquifer. Source water from Marshall's Well, Commissioner's Well, and Duffy's Landing Well is blended and treated with two chemical oxidants to enhance the removal of naturally occurring iron and manganese through greensand pressure filters, chlorinated for disinfection (bacteria and virus inactivation), and has its pH adjusted before being pumped into the distribution system. Georgetown is fortunate to have four interconnections with neighboring water utilities in case of an emergency.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/hotline.



Think Before You Flush!

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and the environment. Keep medications out of our waterways by disposing responsibly. Georgetown Police Dept has a 24 hr/ 7 day a week drop-off box located in the lobby for unused/expired medications, but not needles or syringes.

Dear Customers,

We are closely monitoring a family of chemicals called per- and polyfluoroalkyl substances (PFAS) that have been detected in some public water supplies in Massachusetts and across the nation. DEP currently has a drinking water standard for the sum of six PFAS compounds (PFAS6). This standard requires all Massachusetts public water suppliers to regularly test for PFAS. The sum of PFAS6 may not exceed 20 nanograms per liter (ng/L) or parts per trillion (ppt).

You may have heard in the news that the U.S. EPA recently issued a draft federal drinking water rule that sets the limit for certain PFAS below the Massachusetts standard. U.S. EPA is entertaining public comment on its proposal now, and if the proposed rule is finalized, Massachusetts will adopt limits at least as stringent as those of U.S. EPA; the U.S. EPA process may take another year. Georgetown Water Department will be reviewing our results from previous sampling and evaluating whether further action may be necessary if U.S. EPA lowers the drinking water standard.

Georgetown Water Department has a mission to deliver clean and reliable water, and we are always concerned about threats to our water supply. We already test routinely for over 100 regulated contaminants, and we will take necessary measures to treat the drinking water to this new standard. It's important to note that our source water has not changed, but with relatively recent advances in laboratory testing, the presence of PFAS can now be detected at parts per trillion, whereas in the past, it remained undetected at parts per million. For perspective, 1 part per trillion is equal to one drop in 20 Olympic-size swimming pools. Please be assured that we are following the national rule-making closely and will take the necessary action to work toward compliance with any new regulations and communicate those plans to the public.

Questions?

For more information about this report, or for any questions relating to your drinking water, please call Marlene Ladderbush, Georgetown Water Department Utility Director, at (978) 352-5750.

Safeguard Your Drinking Water

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain it to reduce leaching to water sources, or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use U.S. EPA's Adopt Your Watershed to locate groups in your community.
- Organize a storm drain stenciling project with others in your neighborhood. Stencil a message next to the street drain reminding people "Dump No Waste – Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

> "Thousands have lived without love, not one without water."
>
> *–W.H. Auden*

Source Water Assessment

Georgetown has a source water head protection program in place to ensure the preservation of our groundwater. Mapping of various zoning laws can be viewed at www.georgetownma.gov (select Planning Department, then MIMAP Mapping Program).

An updated Source Water Assessment Plan (SWAP) has been completed for our system and will be added to the Georgetown Water website soon. The purpose of the assessment is to determine the susceptibility of each drinking water source to potential contaminant sources. The report includes background information and a relative susceptibility rating of lower, moderate, or higher. Our source received a susceptibility rating of higher. It is important to understand that a susceptibility rating of higher does not imply poor water quality, only the system's potential to become contaminated within the assessment area.

Until DEP approves and updates our most recent plan, you may view the last SWAP report at www.mass.gov/lists/source-water-assessment-and-protection-swap-program-documents. Georgetown's report can be found on pages 499-506. If you would like a copy of our assessment or have questions, please feel free to contact our office during regular business hours at (978) 352-5750.

Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or at www.epa.gov/safewater/lead.

Public Meetings

Georgetown Water Department is overseen by a board of water commissioners who meet monthly. These meetings are open to the public. Information is posted on the front doors of the Water Office (One Moulton Street) and Town Hall (One Library Street) as well as on both the town (www.georgetownma.gov) and Water Department (https://georgetownwater.org/) websites.

Additional Information

Georgetown Water Department tests its raw (untreated) water for total coliform. In 2022 114 samples were taken, of which only 26 tested positive for total coliform and 2 were positive for *E. coli*. All raw water is treated and disinfected before being sent out to the distribution system.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels. We are pleased to report that your drinking water meets or exceeds all federal and state requirements.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (ppm)	2022	[4]	[4]	1.6	1.0–2.0	No	Water additive used to control microbes
Haloacetic Acids [HAAs]–Stage 2 (ppb)	2022	60	NA	42	2.8–42	No	By-product of drinking water disinfection
Nitrate (ppm)	2022	10	10	0.3	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (ppm)	2020	1	1	0.2	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Perchlorate (ppb)	2022	2	NA	0.103	NA	No	Inorganic chemicals used as oxidizers in solid propellants for rockets, missiles, fireworks, and explosives
PFAS6 (ppt)	2022	20	NA	2.0	1.7–2.0	No	Discharges and emissions from industrial and manufacturing sources associated with the production or use of these PFAS, including production of moisture- and oil-resistant coatings on fabrics and other materials; Additional sources include the use and disposal of products containing these PFAS, such as firefighting foams
TTHMs [total trihalomethanes]–Stage 2 (ppb)	2022	80	NA	72	40–72	No	By-product of drinking water disinfection

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2022	1.3	1.3	1.09	2/20	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2022	15	0	0.01	2/20	No	Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2022	250	NA	36.7	NA	No	Runoff/leaching from natural deposits
Copper (ppm)	2022	1.0	NA	0.151	ND–1.6	No	Corrosion of household plumbing systems; Erosion of natural deposits
Fluoride (ppm)	2021	2.0	NA	0.2	NA	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Iron (ppb)	2022	300	NA	4	ND–8	No	Leaching from natural deposits; Industrial wastes
Manganese (ppb)	2022	50	NA	3	NA	No	Leaching from natural deposits
Odor (TON)	2022	3	NA	1.0	NA	No	Naturally occurring organic materials
pH (units)	2022	6.5-8.5	NA	7.67	NA	No	Naturally occurring
Sulfate (ppm)	2022	250	NA	8.88	NA	No	Runoff/leaching from natural deposits; Industrial wastes
Total Dissolved Solids [TDS] (ppm)	2022	500	NA	194	NA	No	Runoff/leaching from natural deposits

UNREGULATED SUBSTANCES [1]				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppb)	2022	10.073	4.95–13.4	By-product of disinfection
Chlorodibromomethane (ppb)	2022	0.67	0.14–0.67	By-product of disinfection
Chloroform (ppb)	2022	40.14	15.6–52.8	By-product of disinfection

[1] Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist U.S. EPA in determining their occurrence in drinking water and whether future regulation is warranted.

Definitions

90th %ile: Out of every 10 homes sampled, 9 were at or below this level. This number is compared to the Action Level to determine lead and copper compliance.

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

SMCL (Secondary Maximum Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

TON (Threshold Odor Number): A measure of odor in water.

Regulated Testing

To ensure that tap water is safe to drink, the Department of Environmental Protection (DEP) and the U.S. Environmental Protection Agency (U.S. EPA) prescribe regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material and can pick up substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and which may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.